
**Report to
The Vermont Legislature**

Drug Poisoning (Overdose) Fatalities Report

**In Accordance with Act 75, Section 18a (b)
*An Act Relating to Strengthening Vermont's Response to Opioid Addiction and
Methamphetamine Abuse***

Submitted to: House Committees on Human Services and on Health Care;
Senate Committee on Health and Welfare; and
House and Senate Committees on Judiciary

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Drug Poisoning (Overdose) Fatalities Report March 1, 2017

Introduction

In accordance with **Act 75 (2013), Section 18a (b)**, the Vermont Department of Health submits the following annual report on the:

- Number of persons who died during the preceding calendar year from an overdose of a Schedule II, III, or IV controlled substance;
- Number of those whose deaths involved an opioid;
- Number of persons whose deaths involved an opioid who were administered an opioid antagonist, and if so, who administered the antagonist; and
- Number of persons whose deaths involved heroin or fentanyl.

This report utilizes information from Vermont Department of Health Vital Statistics System to address the legislative request. The period of this report is January 1, 2016 through December 31, 2016. All data for 2016 remain preliminary. During that period, there were 104 drug poisoning (overdoses) fatalities involving a Schedule II, III or IV drug, 83 of which involved a prescription opioid. NOTE: Fentanyl is counted as a Schedule II drug, but it is often manufactured illicitly and not prescribed.

- The number of drug poisonings (overdose) fatalities involving a Schedule II, III or IV drug increased since 2014.
- The number of drug poisonings (overdose) fatalities involving a Schedule II, III or IV drug that included at least one prescription opioid increased starting in 2013.
- The number of drug poisonings involving heroin (not included in the above numbers as it is a Schedule I substance) or fentanyl (included in the above numbers, a Schedule II substance) has increased dramatically since 2011.

In addition, this report uses data from the Office of Emergency Medical Services Statewide Incident Reporting Network (SIREN). According to data from SIREN, of the 83 accidental drug poisoning (overdoses) fatalities involving a Schedule II, III or IV and a prescription opioid, 66 were responded to by EMS. However, these individuals were likely in cardiac arrest, or already dead upon EMS arrival.

Drug poisoning (overdose) fatalities involving a Schedule II, III or IV drug

Data Analysis Methodology

The Medical Examiner's Office has statutory authority under Vermont law to investigate deaths when a person dies from:

- Violence; suddenly, when in apparent good health; unattended by a physician or a recognized practitioner of a well-established church; by casualty; by suicide; as a result of injury; in jail or prison or in a mental institution; in any unusual, unnatural or suspicious manner; or
- Circumstances involving a hazard to public health, welfare, or safety.

The Office of the Chief Medical Examiner provides the information and fills out the death certificate data that is stored in the Vermont Department of Health Vital Statistics System.

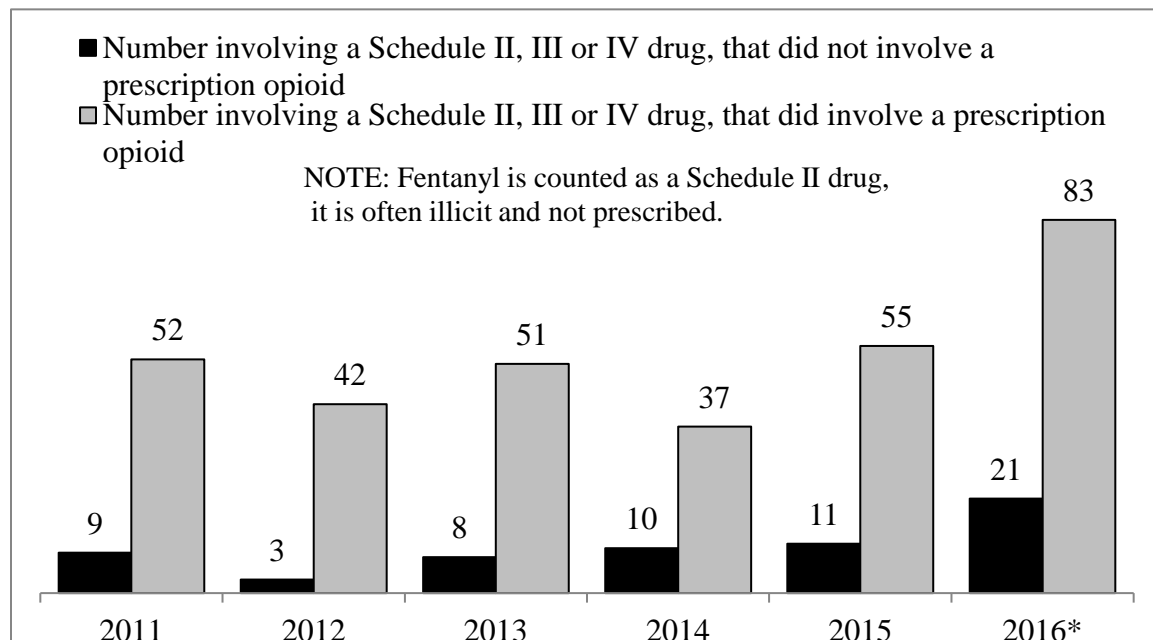
Reviewing drug related deaths is complex for a number of reasons. Most drug-related fatalities in Vermont are due to combinations of substances (e.g., a prescription opioid and cocaine), not a single drug. The circumstances under which each fatality occurs are unique. In addition, not all drug-related fatalities can be attributed to addiction and/or dependence.

The fatalities in this report include accidents, suicides and undetermined drug fatalities. This report does not include deaths that are due to the consequences of chronic substance use such as HIV, liver disease, or infection. This report also does not include deaths that are due to injury such as car crashes related to substance use or abuse. In this report, the term “drug fatalities” refers to drug poisoning (overdose) fatalities involving a Schedule II, III or IV drug (this does not include Schedule I drugs such as heroin— except for the one section of this report devoted to that substance). It must be noted that fentanyl is included as a Schedule II drug even though many opioid overdoses involving fentanyl involve illicitly manufactured fentanyl and not fentanyl that comes from a pharmaceutical prescription.

Analysis

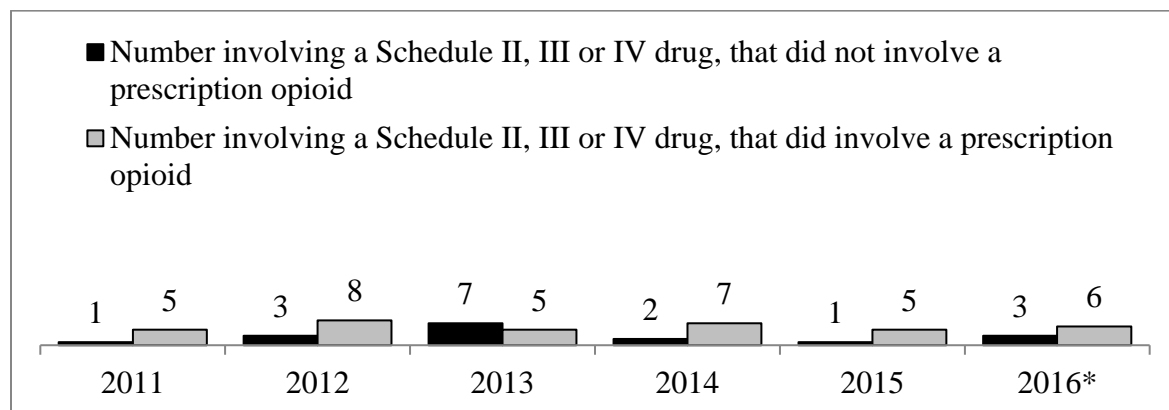
Figure 1 presents the number of drug fatalities in Vermont that were due to accident or undetermined intention (non-suicide). Figure 2 depicts the number of drug fatalities in Vermont that were due to suicides.

Figure 1 Number of fatalities resulting from accidental drug poisoning (overdose) from Schedule II, III or IV drugs in Vermont. Source: Vermont Department of Health Vital Statistics System



* Indicates that these data are preliminary.

Figure 2 Number of suicides resulting from drug poisoning (overdose) from Schedule II, III or IV drugs in Vermont. Source: Vermont Department of Health Vital Statistics System



* Indicates that these data are preliminary.

The numbers presented in this report vary slightly from previous reports due to the change in data source to the Vermont Department of Health Vital Statistics System. The 2016 numbers may change due to new findings or new information on specific cases in future reports. More up-to-date information on drug-related fatalities in Vermont can be found here:

http://healthvermont.gov/sites/default/files/documents/2017/01/ADAP_Data_Brief_Drug_Related_Fatalities.pdf

While data on deaths and whether naloxone was administered by an Emergency Medical Services (EMS) provider or a family/friend cannot be obtained from the Office of the Chief Medical Examiner or the Death Certificate, the Vermont Office of Emergency Medical Services and Injury Prevention Statewide Incident Reporting Network (SIREN) tracks whether emergency personnel administer naloxone. According to data from SIREN, of the accidental 83 drug poisoning (overdoses) fatalities involving a Schedule II, III or IV and a prescription opioid, 66 were responded to by EMS providers. Forty individuals were recorded as dead upon EMS arrival. Of the remaining 26 individuals, 23 were administered naloxone from EMS personnel. However, it is likely all 26 patients were already in cardiac arrest and at this advanced state naloxone is not expected to be effective. Thirteen patients were transported by EMS to the hospital, and 13 had resuscitation terminated in the field. Of note, 2 patients received naloxone prior to EMS arrival by police, and 3 patients received naloxone prior to EMS arrival by friends/family.

The Naloxone Pilot Project collects data on the number of Overdose Rescue Kits (nasal naloxone) that are distributed, as well as the number of kits that are refilled because the client reported using the kit in an overdose situation. Six clients reported overdoses in 2016 where the kit was used in a situation where the individual died. Client reports on this topic are not comprehensive and relies on the client reporting back to the pilot site. More information on these data can be found in the data brief here:

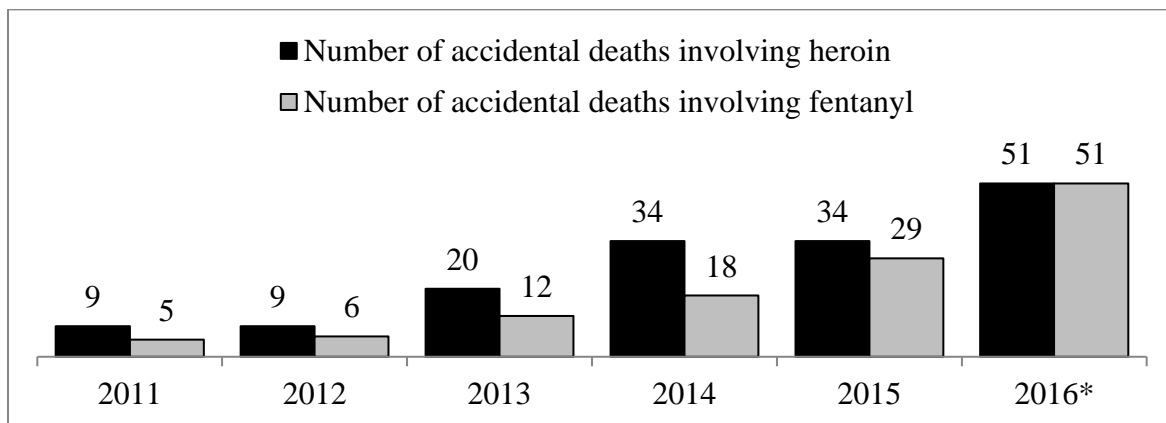
http://healthvermont.gov/sites/default/files/documents/2017/02/ADAP_Naloxone_Data_Brief.pdf

Heroin and Fentanyl

The charge of this report is to present data on deaths involving Schedule II-IV prescription drugs. However, given the recent increases in deaths involving heroin (a Schedule I drug) and fentanyl (a Schedule II drug that is also being illegally manufactured) the Department included the following section. Figure 3 represents the number of drug fatalities in Vermont that were due to accident or undetermined intention (non-suicide) and involved heroin and fentanyl.

Figure 3 Number of accidents resulting from drug poisoning (overdose) from heroin or fentanyl in Vermont (numbers are not mutually exclusive).

Source: Vermont Department of Health Vital Statistics System



There were 10 deaths involving both heroin and fentanyl in 2015 and 23 in 2016.

Conclusion

According to data from the Vermont Department of Health Vital Statistics System, the number of drug poisonings (overdose) fatalities involving a Schedule II, III or IV drug increased since 2014. The number of drug poisonings (overdose) fatalities involving a Schedule II, III or IV drug as well as a prescription opioid increased since 2013. The number of drug poisonings involving heroin or fentanyl has increased dramatically since 2011. According to data from SIREN, of the 83 accidental drug poisoning (overdoses) fatalities involving a Schedule II, III or IV prescription opioid, 66 were responded to by EMS. However, these individuals were likely in cardiac arrest, or already dead upon EMS arrival.

Appendix A

No. 75. An act relating to strengthening Vermont's response to opioid addiction and methamphetamine abuse.

Sec. 18a. 18 V.S.A. § 5208 is amended to read:

§ 5208. HEALTH DEPARTMENT; REPORT ON STATISTICS

(b) In addition to the report required by subsection (a) of this section and notwithstanding the provisions of 2 V.S.A. § 20(d), beginning March 1, 2014 and annually thereafter, the Department shall report to the House Committees on Human Services and on Health Care, the Senate Committee on Health and Welfare, and the House and Senate Committees on Judiciary regarding the number of persons who died during the preceding calendar year from an overdose of a Schedule II, III, or IV controlled substance. The report shall list separately the number of deaths specifically related to opioids, including for each death whether an opioid antagonist was administered and whether it was administered by persons other than emergency medical personnel, firefighters, or law enforcement officers. Beginning in 2015, the report shall include similar data from prior years to allow for comparison.

Appendix B

Definition of Controlled Substance Schedules

Drugs and other substances that are considered controlled substances under the federal Controlled Substances Act (CSA) are divided into five schedules. An updated and complete list of the schedules is published annually in **Title 21 Code of Federal Regulations (C.F.R.) §§ 1308.11 through 1308.15**. Substances are placed in their respective schedules based on whether they have a currently accepted medical use in treatment in the United States, their relative abuse potential, and likelihood of causing dependence when abused. Some examples of the drugs in each schedule are listed below.

Schedule I Controlled Substances

Substances in this schedule have no currently accepted medical use in the United States, a lack of accepted safety for use under medical supervision, and a high potential for abuse.

Some examples of substances listed in Schedule I are: heroin, lysergic acid diethylamide (LSD), marijuana (cannabis), peyote, methaqualone, and 3,4-methylenedioxymethamphetamine ("Ecstasy").

Schedule II Controlled Substances

Substances in this schedule have a high potential for abuse which may lead to severe psychological or physical dependence.

Examples of Schedule II narcotics include: hydromorphone (Dilaudid®), methadone (Dolophine®), meperidine (Demerol®), oxycodone (OxyContin®, Percocet®), and fentanyl (Sublimaze®, Duragesic®). Other Schedule II narcotics include: morphine, cocaine, opium, and codeine.

Schedule III Controlled Substances

Substances in this schedule have a potential for abuse less than substances in Schedules I or II and abuse may lead to moderate or low physical dependence or high psychological dependence.

Examples of Schedule III narcotics include: products containing not more than 90 milligrams of codeine per dosage unit (Tylenol with Codeine®), and buprenorphine (Suboxone®).

Schedule IV Controlled Substances

Substances in this schedule have a low potential for abuse relative to substances in Schedule III.

Examples of Schedule IV substances include: alprazolam (Xanax®), carisoprodol (Soma®), clonazepam (Klonopin®), clorazepate (Tranxene®), diazepam (Valium®), lorazepam (Ativan®), midazolam (Versed®), temazepam (Restoril®), and triazolam (Halcion®).